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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 09/904,600 | 07/12/2001 | Greig C. Scott | 05490H028010 | 2591 |
| 20350 | 7590 | 10/01/2002 | EXAMINER | |
| TOWNSEND AND TOWNSEND AND CREW, LLP TWO EMBARCADERO CENTER EIGHTH FLOOR SAN FRANCISCO, CA 94111-3834 | | | LIN, JOYUH | |
| | | ART UNIT | PAPER NUMBER | |
| | | 3737 | | |

DATE MAILED: 10/01/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

S.M.

Office Action Summary

| | |
|--------------------------------------|-------------------------------------|
| Application No. 09/904,600 | Applicant(s) SCOTT ET AL. |
| Examiner Jeoyuh Lin | Art Unit 3737 |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 12 July 2001.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-18 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) The proposed drawing correction filed on _____ is: a) approved b) disapproved by the Examiner.
 If approved, corrected drawings are required in reply to this Office action.
- 12) The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. _____.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) The translation of the foreign language provisional application has been received.
- 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ . |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4. | 6) <input type="checkbox"/> Other: _____ |

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in-

(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or
(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

-Claims 1-7, 9, 10, and 12-17 are rejected under 35 U.S.C. 102(b) as being anticipated by Atalar. (US 5,699,801)

Atalar teaches an MR detection probe comprising the following structures

-At least two spaced-apart electrodes, which may exceed two (Figures 2 and 8, column 11, lines 1-20 and 48-55)

-Feed wires. (Column 8, lines 40-45)

-Rings around the circumference to the catheter. (Catheter 10, lines 65-67 and column 14, lines 46-65)

-Needle electrodes. (Column 12, lines 53-68)

-Claims 1-6, 9, 13, 14, and 16 rejected under 35 U.S.C. 102(e) as being anticipated by Atalar et al. (US 6,263,229 B1).

Atalar teaches a miniature magnetic resonance catheter coil, comprising the following structures:

-First and second electrically conductive portions that are insertable into a subject, which are understood to be electrodes since they are electrically conductive. (Column 8, lines 58-67)

-Wherein the number of electrodes may exceed two. (Column 9, lines 10-20)

-Feed wires, or a cable connecting electrode to signal detector, or an MR scanner (Column 10, lines 45-50)

-Feed wire and electrode functioning to form a signal detection coil.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

-Claims 8, 11, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Atalar et al. (US 5,699,801)

Atalar teaches all the claims except that it fails to teach extendable and retractable electrodes. However, it is well known in the art to one having ordinary skill in the art at the time the invention was made that electrodes may be designed to extend and retract from a catheter to protect the electrodes from damage when not used.

-Claims 1-6, 13, 14, and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ishikawa et al. (US 6,447,448)

Ishikawa teaches a miniature implanted orthopedic sensor, comprising

-first and second electrodes, in the form of strain gauge sensors in subject

(column 7, lines 10-15)

-rf transmitter sending signals from electrode to signal detector, or an rf receiver.

(Column 7, lines 40-60)

-rf transmitter and electrode functioning to form a signal detection coil.

-the detection coil being able to fit into a catheter.

Ishikawa et al. fails to teach wires. However, the use rf transmitter and complementary receiver are functionally equivalent as that of a wire, and it would have been an obvious matter of design choice to one having ordinary skill in the art at the time the invention was made to supplant the wires with rf transmitter/receiver devices, and vice versa.

Conclusion

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

-Fritschy et al. (US 4,932,411) teaches an MR detection probe, comprising a coil wound about a carrier, insertable into a catheter or biopsy needle, with feed wires that connects it to a signal detector in the form of a computer.

-Narayan et al. (US 5,170,789) teaches an MR coil with wire lead in catheter insertable into human cavities. (Column 2, lines 65-68 and column 3, lines 1-15. However, there is no mention of electrode.

-Berke (US 4,672,972) teaches a solid state MR probe comprising coils and a pre-amplifier located at the distal end of the catheter. (Column 3, lines 50-68 and column 4, lines 5-10)

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeoyuh Lin whose telephone number is (703) 306-5990. The examiner can normally be reached on m-f, 8:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marvin Lateef can be reached on (703) 308-3256. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-0758 for regular communications and (703) 308-0758 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0858.

JYL

JYL
September 23, 2002



Marvin M. Lateef
Supervisory Patent Examiner
Group 3700